1131-35-160 Dat Cao*, Department of Mathematics and Statistics, Texas Tech University, Box 41042, Lubbock, TX 79409, Akif Ibraguimov, Department of Mathematics and Statistics, Texas Tech University, Box 41042, Lubbock, TX 79409, and Alexander I. Nazarov, St. Petersburg, Department of Steklov Institute, Fontanka 27, St.Petersburg, 19102, Russia. Mixed boundary value problems for Degenerate elliptic equations at infinity.
We study qualitative properties of the solutions of the Zaremba type problem in unbounded domain with respect to the degenerate elliptic equation at infinity in non-divergent form. Main result is Phragmén-Lindelöf type principle on growth and decay of the solution in the domain which is narrowing at infinity w.r.t. designated direction $x_{1}$. Equation is considered to be elliptic in the finite part of the domain but may be degenerate at infinity. Main result formulated in term of the so called s-capacity of the Dirichlet portion of the boundary, with Neumann boundary satisfying certain "admissibility" condition. (Received July 12, 2017)

